

**A FINAL REPORT OF THE AAWG  
CONTINUED AIRWORTHINESS OF STRUCTURAL REPAIRS**

## **9.0 Conclusions**

Continued airworthiness of existing repairs on aging airplanes was one of the five initiatives chartered by AATF/AAWG in 1988. Considerable activities occurred during 1989-1994 to develop consistent and comprehensive OEM guidelines for operator assessments of repairs.

AAWG conducted surveys of 65 airplanes. The surveys covered repairs on nine different aging airplane models. No immediate airworthiness concerns were observed. Some repairs of good quality may inhibit damage detection during normal maintenance activities and therefore may need supplemental inspections due to size, configuration and/or proximity consideration. It was also concluded that the operators need repair assessment procedures from the OEMs for existing and new repairs on aging airplanes.

The following are the conclusions from this report:

- The industry as a whole lacks sufficient information and training to evaluate previous installed repairs for continued airworthiness.
- Some existing repairs may require supplemental inspections to maintain structural airworthiness.
- Sufficient operational rules exist to enforce inspection programs on repairs for structural integrity but may not be sufficient to highlight the concern and necessary action to be taken.
- Data from surveys of repairs indicates no immediate airworthiness concern for previously installed repairs.
- Fuselage pressure boundary repairs represent the most significant concern to safety.
- Airline maintenance programs are focused to identify questionable repairs and replace them.